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ICE BREAKER



ICE BREAKER MAGAZINE

ICE BREAKER magazine is published independently by Malcolm Wallhead and Associates as a quarterly magazine covering Tasmanian Polar and Southern Ocean related topics.

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EDITORIAL

Any TPN member not being inspired by at least one of the key strategies of the recently released Tasmanian Polar Network Strategic Plan for 2004-2005 should be reconsidering their reason for joining. From the outset, the TPN emphasis has been on action, not just words, and after 10 years, the hard work of dedicated members is more and more evident in the Antarctic projects being developed. I remember an early SWOT Analysis attempted by the Department of State Development, which failed because there was no single focus that all TPN members could agree upon. After many reviews, the 6 key strategic objectives outlined in the current plan offer choices to all TPN members to develop their Strengths and business Opportunities and know there is support from other members to counter their Weaknesses and Threats.

The State Government's Antarctic, Sub-Antarctic and Southern Ocean Policy reinforces and expands upon the TPN's objectives and it is NOW that there are opportunities for Tasmanian businesses to participate in projects such as the infrastructure required for the Antarctic air link.

The recent Midwinter Festival was another successfully organised series of events, this year co-ordinated by David Laskey and ably supported by TPN members and others in the Antarctic community, including volunteer guides whose placements were filled very early. I noticed that a few other areas of Tasmania were advertising Midwinter celebrations too, and it would be good to see these and others linked to the Festival itself.

Sadly, the former Minister for Antarctic Affairs and recent Premier of Tasmania, Jim Bacon, passed away during this Midwinter Festival time, but it is encouraging to note new Premier, Paul Lennon, is as supportive as Jim was about Antarctic matters.

Anthea Wallhead

Front cover: One of Skytrader's ski-equipped CASA-212s.

Back cover: Another polarogramme kindly supplied by Klaus Pedersen. NZ.



New State *Antarctic, sub-Antarctic and Southern Ocean Policy*

On 29 July 2004, I had the pleasure of launching the Tasmanian Government's new State *Antarctic, sub-Antarctic and Southern Ocean Policy* at the site of the proposed Antarctic and Southern Ocean Gallery at the Tasmanian Museum and Art Gallery.

Tasmania's *Antarctic, sub-Antarctic and Southern Ocean Policy* was the outcome of extensive consultation with Tasmania's Antarctic community and I thank everyone who participated in the policy development process.

The government has a vision for Hobart and the state to be recognised globally as the world's pre-eminent international gateway to the Antarctic, sub-Antarctic and Southern Ocean. In addition, Tasmania aims to be known worldwide as an international centre of excellence for science activities in the Antarctic and Southern Ocean. We want to play host to a thriving community of artists, scientists, engineers, companies and administrators whose focus is beyond 40 degrees south.

Tasmania's unique connection with the Antarctic, sub-Antarctic and Southern Ocean provides competitive advantages over other Australian states and countries and we aim to capitalise on these advantages. The new policy identifies six areas that provide opportunities for Tasmania including:

- information sharing and partnerships
- logistics and provisioning
- commercialisation of products and services
- conservation and environmental management
- education and training
- cultural heritage and tourism.

Under this policy, the government will strive to achieve the following three goals over the next three years:

1. To increase the size, diversity and economic contribution of Tasmania's Antarctic community to the state.
2. To raise the profile and celebrate Hobart's contemporary and historic links to the Antarctic, sub-Antarctic and Southern Ocean ecosystems.
3. To support endeavours to improve the understanding and management of Antarctic, sub-Antarctic and Southern Ocean ecosystems.

The policy also identifies 47 actions to help realise economic, social and political benefits for Tasmania.

The government will achieve the vision, goals, objectives and actions of this policy by leading the development of the Antarctic sector in Tasmania, partnering with other governments and organisations and supporting existing agencies and businesses. In addition, the government emphasises that cooperation and a coordinated approach are needed. The value of the policy will be determined by how successfully its strategies support Tasmania's involvement in the Antarctic sector and maximise benefits for the state.

Lara Giddings MHA
Minister for Economic Development

FROM THE DESK OF WILL HODGMAN



The recent release of the State Government's Antarctic, Sub-Antarctic and Southern Ocean Policy is welcomed. It is important that the Government, and also the close-knit polar community, have a clear (and hopefully effective) framework for advancing our interests in Antarctica. The scientific, environmental, economic and cultural benefits are seemingly limitless.

I do endorse the Government's decision to consult widely with interested stakeholders, and its objective to act in a cooperative and coordinated manner in administering this important policy.

Any effective policy requires ongoing and frequent review and re-evaluation, and the establishment of a Reporting Committee should assist in that regard. Tasmania's enthusiastic Antarctic community will no doubt continue its active involvement in that process, which will greatly contribute to positive outcomes.

Congratulations to all those involved in developing this important policy, and let us all ensure it delivers its intended results.

Recently I attended a dinner meeting of business people from the Kingborough municipality at the Australian Antarctic Division. The evening was a tremendous success, and attendees enjoyed pre-dinner drinks and a superb meal in the reception area, followed by the screening of an entertaining and informative film on Australia's involvement in Antarctica.

The meeting showcased the impressive and unique facilities at the AAD, and also the great potential for the Division to host community events of this type. It is an effective way of increasing and enhancing the public's understanding of Australia's Antarctic Program, and Tasmania's critical role in the region.

Will Hodgman MHA



(L-R) Bill Bleathman, Sir Guy Green and Lara Giddings, MHA at the Antarctic Policy Launch.

PEG PUTT'S MESSAGE



I read with interest the outline of the TPN's six key strategies embodied in the Strategic Plan for 2004/5 which were explained by Bill Lawson in the last edition of Ice Breaker.

The Network fills a very important niche in encouraging the sense of community between Network members whilst at the same time fostering co-operative competition to optimise Tasmania's business opportunities in cold climate business, especially the Antarctic and sub-Antarctic.

The focus on identifying new business opportunities, capacity-building and promotion of our capabilities, attracting new entities to operate from Hobart for their Antarctic activity, and commercialising Antarctic research and design is both commendable and necessary.

It is very important that the Tasmanian community also feels in touch with these Antarctic activities, and has a sense of ownership of this important relationship, so it was great to see this as a plank in the strategy. This will not only ensure ongoing support, but also provide another avenue for promotion and outreach.

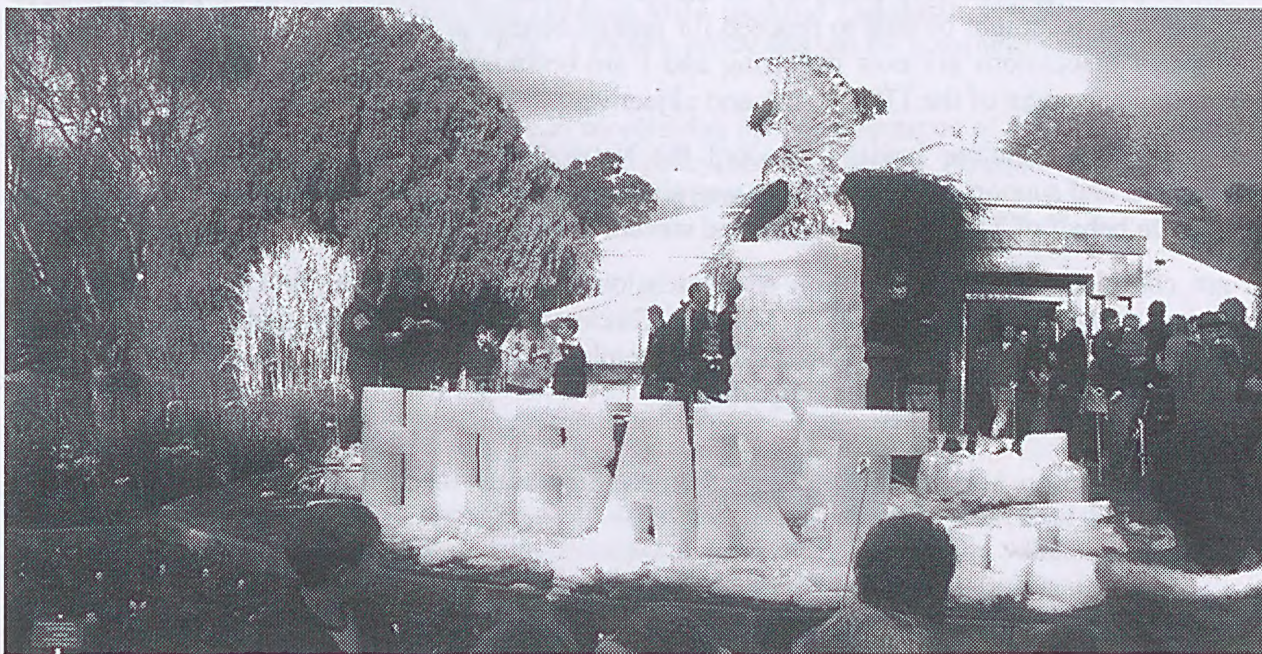
The Antarctic Midwinter Festival has again highlighted our particular relationship with the beautiful south, and the profile of this event seems to have been building year on year. Congratulations to all involved. That sense of community ownership is impressive.

This, and strong interest around the globe, leave us with important opportunities in tourism and also with a responsibility to manage this industry in the best interests of the Antarctic environment now and into the future. Our expertise in this area must be another service which we can market to others.

Lastly, I note that Aphrodite, Jerry Hall's albatross was 'not dead only resting' (to quote the Monty Python dead parrot sketch) although when my last article went to press we all thought she was a goner. This bird won the Big Bird race and I wonder who collected on their bet and how many became aware of the problems with illegal longline fishing for Patagonian toothfish.

Peg Putt MHA

Greens Leader and spokesperson on Antarctic Affairs.



Kenji Ogawa's ice sculpture at the Midwinter Festival. Photo by Peter Wallhead.

TPN CHAIRMAN'S MESSAGE



Spring is now upon us so it all starts again for the coming Antarctic season. This season will see the first applications of the Airlink, albeit only the intra-continental component so far with the ski-equipped CASA 212's.

The Network voiced concerns when funding for the jet aircraft to provide the inter-continental link was not announced in the recent Federal Budget. Senator Abetz then publicly assured us that there is nothing to worry about and that the Howard Government remains fully committed to the whole Airlink. Good!

The Network is now pressing the Shadow Minister, Kelvin Thomson, to affirm the ALP's full support for the Airlink ahead of the coming Federal Election so that we have both major Parties 'locked in'. As soon as the Opposition's position is declared, we will make appropriate press statements, so keep an eye on the paper!

The Midwinter Festival was again a great success with several new initiatives making their mark as well as growing participation levels. Several new ideas have emerged as a result and I have no doubt next year will be even better. I would like to acknowledge and applaud the personal efforts of David Laskey and the 'Antarctic Tasmania' team of Ben, Brett and Cordula who again put in the 'hard yards' to make it all happen. The organising committee and the many volunteers as well as the corporate supporters and sponsors should all take a bow.

The Network was well represented at the SCAR/COMNAP conference in Bremen and I look forward to hearing and seeing the outcomes soon. I note that the next SCAR/COMNAP conference will be held in 2006 in Hobart and this represents a tremendous opportunity for Tasmania. We will need to make a very big and special effort on this occasion to get the most out of it.

About a year ago, the Network decided to make a strategic approach to the TCCI to try to widen our base and capabilities for the benefit of the State as a whole. During the past couple of months, the TCCI has responded very positively to the TPN's initial approach and has sought discussions regarding how we might be able to proceed for mutual benefit to both organisations and Tasmania. A series of discussions are now occurring and I am optimistic that this will give rise to a very positive enhancement of the TPN's work and objectives.

In closing this column, I wish to record the Network's recognition of Premier Jim Bacon's contribution and support to our work. Jim was always a strong and positive supporter to us and he is missed. On behalf of TPN Members, I extend sincere condolences and gratitude to Honey Bacon.

I am confident of the continuation and extension of support by Premier Lennon through the enthusiastic and energetic efforts of Minister Giddings to the Antarctic and Southern Oceans components of her portfolio. On behalf of TPN members, I wish Lara every success and assure her of the Network's ready and willing support.

Bill Lawson.
Chairman.

ANTARCTIC TASMANIA



Antarctic Midwinter Festival

Thanks to members of the local Antarctic community, the 2004 Antarctic Midwinter Festival was an outstanding success. With increased visitation to many key events, including the Longest Night Film Festival, the Huskies Picnic and the Australian Antarctic Division Field Camp, more than 40,000 people participated in festival events. New to this year's festival was the very popular ice sculpture demonstrations. Japanese ice sculptor Kenji Ogawa enchanted crowds at Salamanca Place and the Royal Tasmanian Botanical Gardens.

The festival website enjoyed unprecedented visitation with 185,000 hits in June and more than 70,000 hits during the festival period. Significantly, the value of media coverage generated by the festival was estimated at more than \$250,000. This included a national radio broadcast from Mawson Place by ABC presenter Ian McNamara on *Australia All Over*.

The State Government provided \$40,000 in seed funding to host the festival, administered out of the Department of Economic Development's Antarctic Tasmania. The State Government's seed funding was matched collectively by a number of external organisations, including the Hobart City Council, the Tasmanian Polar Network and businesses active in the Tasmanian Antarctic sector. The festival draws upon a very high level of support-in-kind from institutions like the Australian Antarctic Division and Antarctic community volunteers. Antarctic Tasmania would like to extend a warm thanks to all who contributed to this year's festival.

New websites

The web portal www.antarcticgateway.info was officially launched during the Midwinter Festival. This site promotes Hobart as an international Antarctic gateway and provides convenient access to a quality collection of online resources. Antarctic Tasmania's website www.development.tas.gov.au/antarctic has also recently had a comprehensive facelift. The new website provides improved access to information such as the new State Antarctic policy and direct access to a number of third-party websites.

New State Antarctic Policy

Minister for Economic Development Lara Giddings MHA launched Tasmania's new *State Antarctic, Sub-Antarctic and Southern Ocean Policy* in July. This new policy sets out the government's three-year vision for the Tasmanian Antarctic sector.

Antarctic Tasmania will play a central role in coordinating the implementation of the 47 actions listed in the policy. If you would like to obtain a copy of the policy, contact Antarctic Tasmania on (03) 6233 5493 or visit our website at www.development.tas.gov.au/antarctic

Ben Galbraith
Acting General Manager

ATTENTION TPN MEMBERS:

The TPN Tourism Position Paper's Members Feedback Form needs to be returned to Antarctic Tasmania by September 8, 2004. If you have any suggestions or amendments, please send them in before that date so the Tourism Paper can be discussed at the next TPN meeting on September 17, 2004.

The closing date for comments on the TPN strategic Plan 2004-2005 has now passed and the TPN Committee will be finalising the plan soon.

HOBART AIRPORT'S ANTARCTIC FUTURE

The 2004 Preliminary Draft Master Plan for Hobart International Airport is a comprehensive overview of development of Airport land in the next 5 years. The first Master Plan was produced in 1999 and subsequent, updated replacements occur every 5 years over a 20-year period. The current Master Plan was available for public comment until August 3, 2004 and the revised plan will be submitted to the Minister for approval. The Antarctic Air Link plays a significant part of several aspects of the development of the Airport, including the following:

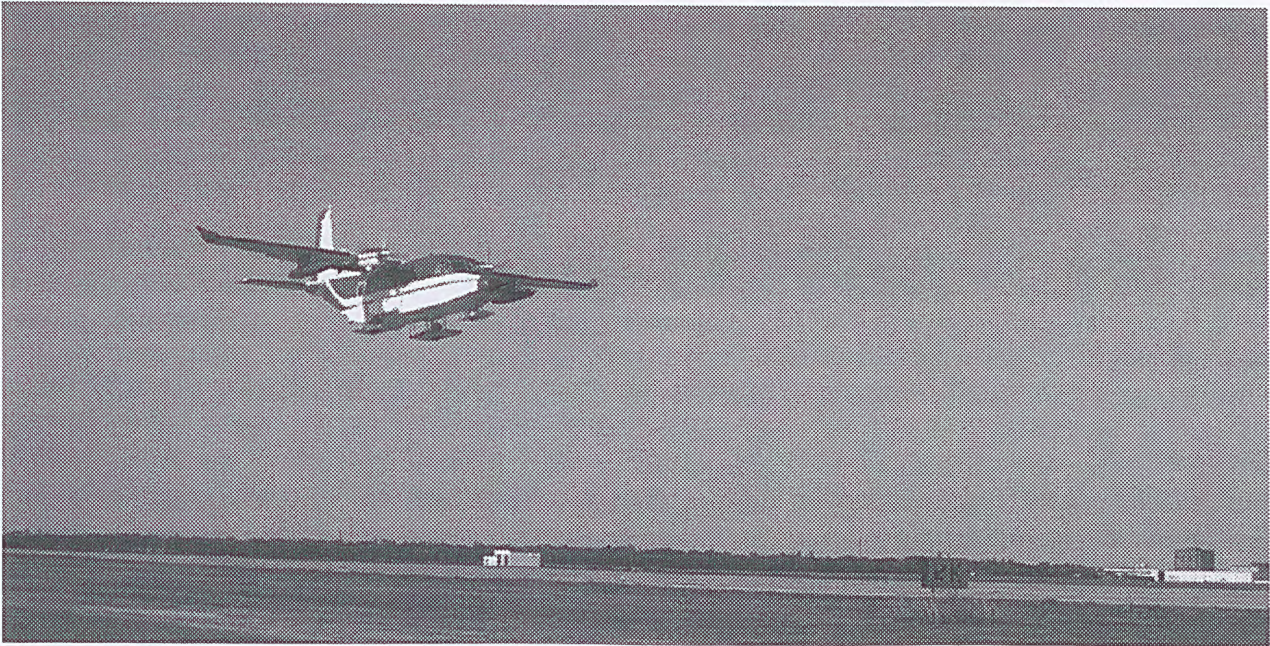
- The introduction of an Antarctic Air link will necessitate new aeronautical infrastructure such as taxiways, aprons and hangars.
- In anticipation of this development, HIAPL has negotiated the purchase of additional land in the southwest corner of the Airport from the state Government and Holyman Avenue will be extended to Surf Road to provide access.
- A key factor in the expansion, or not, of the current runway and taxiway systems, is the requirements of Antarctic operations.
- Once regular summer flights to Antarctica commence for Australian Antarctic Division personnel, scientists from overseas polar institutes may also utilise Hobart Airport for access to Antarctica.
- A more intensive use of the existing International Terminal Building may be dependent on its use for flights to Antarctica by Australian and other nations' research scientists.
- Antarctic freight facilities will be included in the development of warehouses and cool stores required to meet increasing domestic and international freight needs
- **These Antarctic-related aviation facilities are expected to be developed during the initial planning period, to 2009.**

Already underway: By October this year, two CASA 212-400 aircraft will have been shipped to Hobart and then on to Antarctica to begin intra-continental flights between Casey, Mawson and Davis Stations. These aircraft have been specially modified to land on skis, not wheels, by Skytraders, suppliers of the air link. The Federal Government is still considering funding for the intercontinental Dassault Falcon 900EX jet, but it is expected that the air link will be fully operational by October 2005.

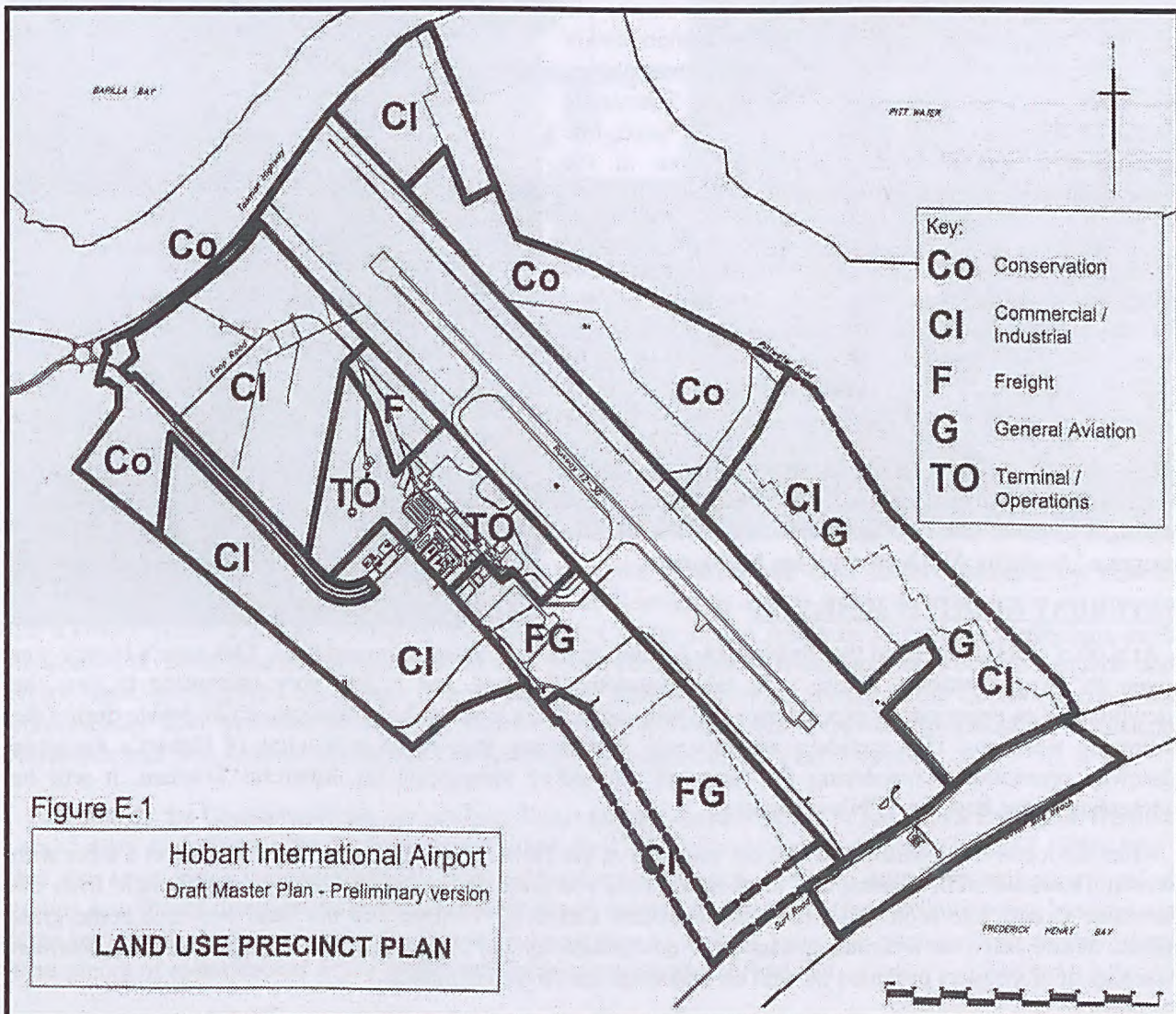
[Thanks to Wayne Tucker, HIAPL CEO for use of Draft Master Plan data. Further information about the Air Transport project is available from the Australian Antarctic Division's website: www.aad.gov.au/airlink or the AAD's Airlink Newsletter contact, Charlton Clark, Project Manager, email airlink@aad.gov.au.]



**Above and next page: Skytrader's ski-equipped CASA-212 for intra-continental Antarctic flights.
(Photos courtesy of Norman Mackay, Skytraders)**



Below: Hobart International Airport. Lowest FG area will include Antarctic flight facilities.





A MIDWINTER DIARY

SATURDAY MORNING, 19 JUNE, 2004

The first Midwinter Festival event I attended this year was the official launch in Salamanca Square. With the giant mobile screen projecting Antarctic images and the lively Midwinter Festival poster behind the speakers' lectern, the 10-day Festival was launched by Lara Giddings, MHA, who was introduced by Tasmania's Antarctic Ambassador, Tim Bowden. This was Tim's last year in this position and a new Ambassador will be announced soon.

After Lara's speech, encouraging all Tasmanians to dress warmly and enjoy the variety of events organised for their entertainment, Salamanca Square was filled with a procession of drummers, school children wearing penguin masks and people wearing giant penguin costumes, over 3 metres tall – a slightly surreal image of cultural integration! (However, over 40 countries do undertake research in Antarctica.) The procession slowly toured the Square then headed out to Salamanca market. The giant penguins reappeared at the Royal Tasmanian Botanical Gardens later that week and I spied one suspended in the children's discovery room at the Tasmanian Museum and Art Gallery in July.

Breakfast at Antarctic Tasmania's office overlooking the Square followed the launch and a tasty collection of foods and drinks was provided. Members of the Tasmanian Polar Network, as well as others from the Antarctic community and Festival event organisers attended, and this year's Festival red beanies and blue jackets were distinctive amongst the crowd.

Later that day, I visited the Mawson exhibition in the Waterside Pavilion in Mawson Place and watched the setting up of a tent for the next day's ABC Radio program 'Australia All Over' with Ian McNamara.

SATURDAY NIGHT, 19 JUNE, 2004

At 6.00 o'clock, I attended the Phillip Law Lecture at the Federation Concert Hall. This year's lecture was given by Greg Mortimer, whose topic was Antarctic Tourism, and it was very interesting to hear the viewpoint of an experienced expeditioner and tour guide. This topic was also the subject of debate during the following week and TPN members are currently formulating their position in view of Hobart's Antarctic Gateway promotion. Considering the range of alternative viewpoints on Antarctic Tourism, it will be interesting to see how the TPN's compares.

After the lecture, the Midwinter Dinner was held at the Hobart Grand Chancellor, and I sat at a table with Screen Tasmania staff, visiting and local documentary makers and a 'second honeymoon' couple from the Sunshine Coast! The food and wine were excellent and Billy Whitton and his band provided some great music. While last year's dinner guests were entertained by old Antarctic film footage, this year Norman MacKay of Skytraders provided us with an update on the Antarctic airlink.



Unfortunately, as another TPN member pointed out to me, little reference was made to the significance of the Midwinter Dinner to those in Antarctica and therefore the main reason Tasmanians celebrated the same event – to reinforce our links. There was also no mention of Tasmania's Bi-centenary, which also involved Tasmanian Antarctic connections, and even the special Sub-Antarctic plants on each dinner table were ignored. Perhaps we can establish a direct Antarctic link to one of the stations next year, to remind everyone that it is Antarctica that makes our festival unique and not just another winter fun celebration.

SUNDAY, 29 JUNE, 2004

Films, School Discovery Days, lectures and debates, exhibitions and an *Aurora Australis* open day were among the events held during the week and two weekends of the Midwinter Festival and I attended the Huskies Picnic at the Royal Tasmanian Botanical Gardens on the final day. The Gardens hosted a range of events throughout the day, and food and drink stalls catered for the large crowd. Siberian Huskies 'towed' a quad bike around the paths this year and the 'Muttley Crew Dog Troupe', a variety of mixed breed dogs performing tricks with and for their owners, was a contrasting attraction to the Huskies, Malamutes and Samoyeds being shown by their owners.



Several man-haul and dog sleds were set out near the Huskies and their history narrated by veteran Antarctic, Rod Ledingham. As well, an exhibition of illustrations of Sub-Antarctic mosses was on show in the RTBG's visitor's centre. Drawn by Rod Sepplet, Curator of the Antarctic Division's Herbarium, each illustration revealed fascinating details of mosses found on Macquarie Island and elsewhere. Macquarie and Heard Island photographs by Alistair Dermer and Karl Rollings were on display in the Conservatorium this year. Alistair later won first prize in the animal portrait section of the inaugural Australian New Zealand Antarctica and New Guinea Nature and Landscape Photographer of the Year Awards.

Just outside the Conservatorium, ice sculptor Kenji Ogawa shaped blocks of ice with a chainsaw. He then carved a sea eagle from a block of clear ice and mounted it high on a column of opaque ice, and 'HOBART' was also sawn into a wall of ice in the front of the display. Sounds of Taiko drummers and other musical groups were heard throughout the Gardens, and except for paths outside the Conservatory being blocked too often by people chatting/viewing the ice sculptures/trying to visit or leave the photographic display, there were plenty of opportunities to see Midwinter Festival events on the final day.



Midwinter Festival activities. Photos by Peter Wallhead.

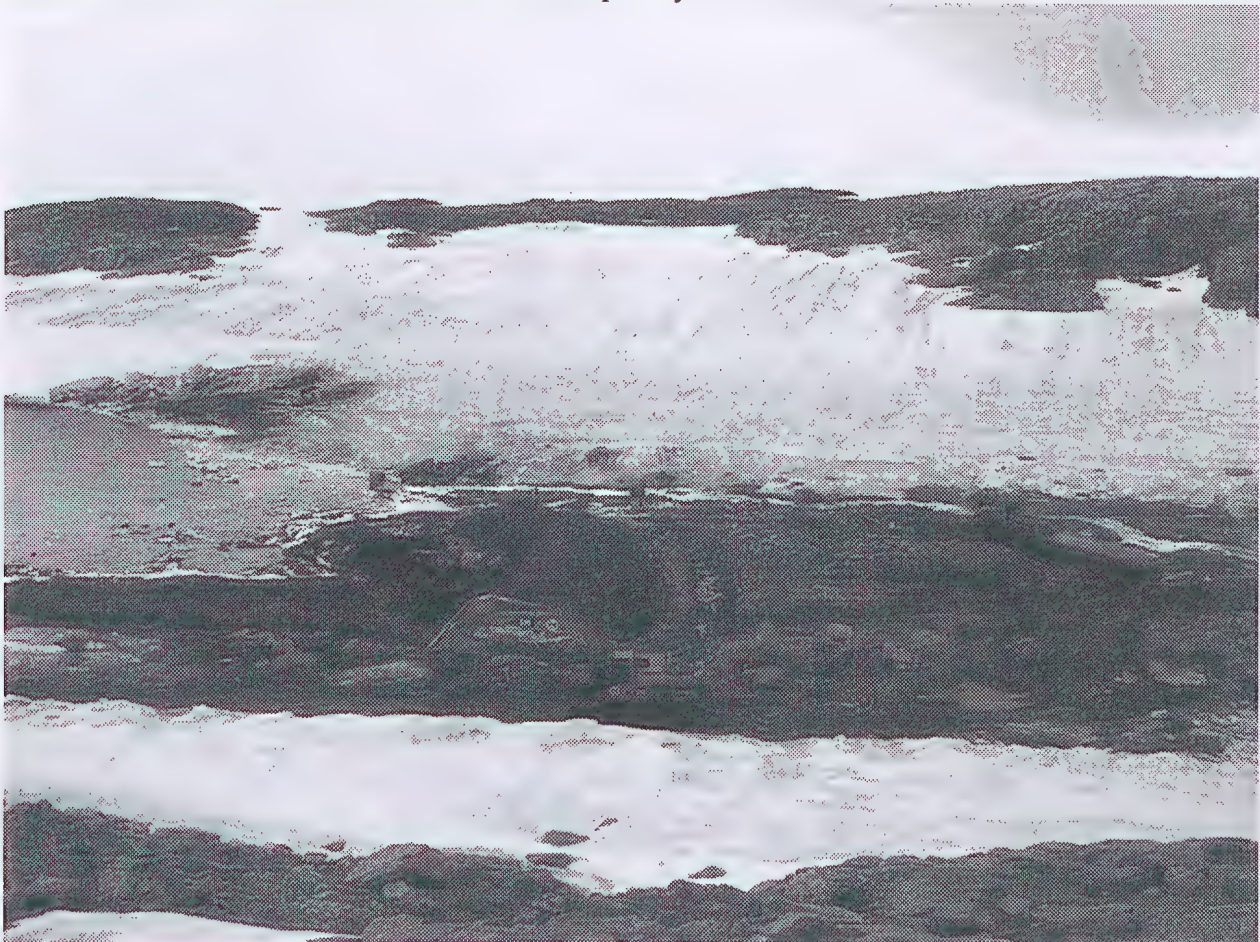


THALA VALLEY CLEAN-UP

Australia has adopted a position of leadership in promoting high standards of environmental stewardship within the international Antarctic community. One of Australia's major achievements was agreement of all Treaty Parties to the Protocol on Environmental Protection to the Antarctic Treaty (the Madrid Protocol). The Thala Valley clean-up is the first part of a long-term program to address the contamination problem at Australian Antarctic stations. It is a case-study to develop and validate techniques that may be used at other sites. The overall clean-up program is a direct response to our obligations arising from the environmental protocol.

While last summer was the first major controlled physical excavation for the Thala Valley Clean Up project, the operational support and scientific research that was undertaken to allow this project to happen, has been on going for many years. Planning and preparation included site assessments in previous summers to identify choice of removal strategies, design and construction of purpose built 'quarter height' (3x2.4x1.2m) shipping containers that existing plant could handle (10t) and that met Australian shipping standards; design/supply of trailers for transporting the containers on the snow and ice; shipping appropriate machinery; a specially designed water treatment plant; containers etc down in previous seasons, securing and training appropriate personnel.

The Thala Valley clean up (see photo below) was one of the major projects over the last summer at Casey. Shortly after arrival in October there was a big task clearing snow off the site, some of which was contaminated. The bulk of the waste was removed during November/December 2003 before the active layer melted, ultimately filling around 235 shipping containers. These containers were sampled by a team of chemists then tarped over for return to Australia. Collex treated the contamination waste/soil with proprietary remediation techniques then transported it to an appropriately certified landfill near the Port of Hobart for deep burial, in accordance with stringent quarantine and National Environment Protection Measure requirements. Australian Quarantine negotiations were an important part of the project as it was the first time soil has been imported into Australia in that sort of quantity.



Water treatment was a significant component of the project. Diversion channels/trenches were excavated in 2001 to divert water away from the site as the summer temperatures melt ice and snow each year. Any water that gathered in the tip site was treated on site in a specially designed treatment plant, to separate particulate and dissolved contaminants from site run-off. The process utilised ion exchange columns containing metal chelating ion exchange resins, which target cations of concern such as copper, lead and zinc. Similarly melt water from the containers of waste and contaminated soil needed to be treated on site.

Reporting only on the quantity of waste removed from Antarctica is not in itself a meaningful measure of the success of the operation. AAD have taken a cautious approach to the clean-up of Antarctic waste sites to ensure that the clean-up itself does not cause a greater environmental impact than leaving the site untouched. Comprehensive monitoring was designed to provide feedback to the Division on the success or otherwise of our approach to the project. The monitoring has three main components that provide information at different time scales. *Short-term monitoring* provided information to direct the clean-up operation as it progressed. In the clean-up's final assessment and audit, *medium-term monitoring* confirmed the work did not add to environmental impacts. *Long-term monitoring* will determine whether the effort invested in the clean-up creates significant and lasting environmental improvements.

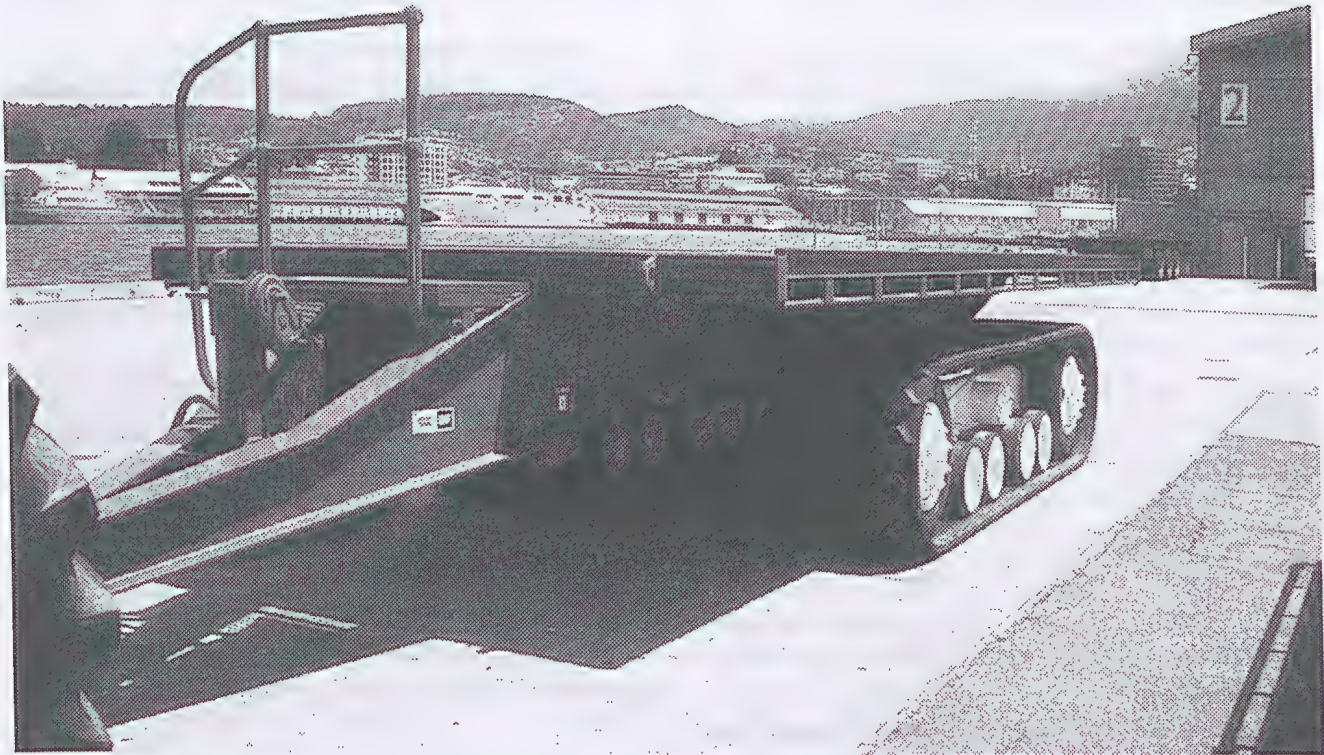
This project involved extensive collaboration: between AAD and various government departments (federal, state and local); with academic institutions including Melbourne, Tasmania, Macquarie and Wollongong Universities; with private industry, Collex providing custom designed shipping containers, people, remediation technology, IntelEco (now H2Au) were involved in design of vacuum distillation plant and Peter Fewkes of William Adams Pty Ltd designed and provided the trailers for transporting the containers; across departments within AAD including science, policy and operations.

The Thala Valley site has now been validated as clean and half of the excavated material has been treated. The remaining soil and contaminated waste is stockpiled on site until it can be RTAed for treatment and disposal.

Heather Cook, Project Co-ordinator, Clean-up Program, AAD.



End of metal stockpile, Thala Valley, Antarctica. Photo: Courtesy of Heather Cook, AAD.



Above: William Adams' trailer ready for transport to Thala Valley. Photo by Peter Fewkes, William Adams

Below: Loading a Collex container on to Williams Adams' trailer. Photo courtesy of Heather Cook, AAD



EQUIPMENT FOR THE THALA VALLEY TIP PROJECT

(Article by Peter Fewkes, William Adams)

William Adams has had a long and proud association with the Australian Antarctic Division as the supplier of Caterpillar equipment adapted for the harsh Antarctic conditions. When the Thala Valley tip project was being considered William Adams worked closely with the Division in assisting in sourcing the most suitable equipment to extract and repatriate rubbish from the valley.

The application posed some unique difficulties, as there would be ice, snow and eventually slush on exposed ground to contend with during the extended summer work season. Together with the variable conditions, the machine selected to dig up the rubbish would have to be capable of digging through solid ice to gain access to the material, be able to pick up irregular objects, and be able to handle the loaded rubbish containers and move them to the coast for shipping back to Australia.

The solution proposed by William Adams consisted of two specialised pieces of equipment. The first was a 35 tonne winter prepared Excavator equipped with a heavy-duty bucket, a ripper and material handling thumb attachment. The special heavy-duty thumb was designed and built at William Adams' Hobart premises specifically for the task. The machine was also fitted with a quick attachment system and that allowed the use of a special lifting frame for the handling of the rubbish containers. The container handler was also designed and built by William Adams.

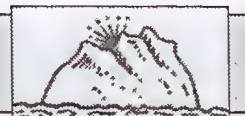
The second item was the supply of a purpose designed and built rubber belted trailer. The trailer is capable of operating over the ice, snow, slush or bare rock and its conception came after previous attempts to move containers using sleds or rubber tyred trailers were not successful due to the thawing snow and many hidden objects in the ground that would damage trailer tyres.

The trailer is fitted with Caterpillar's Mobil Trac System undercarriage that uses special rubber track belts enabling it to traverse all types of terrain with ease. The trailer is capable of transporting two loaded containers where conditions permit while having very low ground pressure when transporting one loaded container. The MTS trailer has been so successful that the Division purchased a second unit (built entirely in Hobart) for the air transport project.

Working with local suppliers to find solutions specific the harsh and specialised needs of Antarctica, the Division provides a unique opportunity for companies like William Adams to develop their expertise and seek wider markets within Antarctica. A truly win - win outcome.



William Adams' new tracked trailer. Photo courtesy of Peter Fewkes, William Adams



RACE RESULTS

Ladbroke's Big Bird Race between Australia and South Africa ended in July and Jerry Hall's albatross, 'Aphrodite', finished first despite disappearing for two weeks. Second was Nicholas Coleridge's 'Xanadu' and third was Susan Hampshire's 'Monarch of the Glen'. More than \$40,000 for seabird conservation was raised through betting and sponsorships.

NOW AFLOAT

Construction of the Great Southern Aquarium at Elwick Bay, Goodwood, is expected to start later this year, after modifications to the original plans were made to satisfy the Glenorchy City Council's conditions. Included on site will be sixty separate tanks for marine life, as well as a 15m x 6m x 7m deep ocean kelp tank, plus other tourist and educational facilities.

Meanwhile, Antarctic Adventure's site in Salamanca Square is again up for sale, after negotiations failed between the State Government and the Echo Group. An agreement for sale should be completed by the end of October, 2004.

MORE MARITIME HISTORY

A new maritime history museum will be included in the Solis project, a multi-million dollar tourism development at Louisville Point, near Orford on Tasmania's East Coast. Solis's museum project consultant, Michael Bland, recently travelled to France and the Netherlands to visit museums to view art, relics and documents relating to the East Coast, which was collected in the 17th, 18th and 19th centuries by explorers such as Baudin and Tasman. This museum will complement Hobart's Maritime Museum's collection of historical artefacts of early explorers of the Southern Ocean around Tasmania.

ANARE CLUB SURVIVAL

The June edition of Aurora magazine discusses the role the ANARE Club and Aurora magazine should play in the future, considering the dwindling numbers participating in its activities, although membership is increasing. Assistant editor, Malcolm Kirton, even suggests Hobart may be the preferred base for the magazine before it appears only on the Internet. Members' suggestions can be sent to ANARE CLUB, PO Box 2534W, Melbourne, Victoria, 3000.

WHALE CARE

- Special 'whale lanes' off the USA coast have been created in order to reduce collisions between ships and North Atlantic right whales. Ships will be diverted around whale areas and speed limits and buoys alerting ships to nearby whales will be employed.
- The USA Navy will be sued unless new steps are taken to protect whales and other species from sonic booms designed to detect enemy submarines. Environmentalists and animal rights groups say the waves cause whales to bleed from the eyes and sometimes beach themselves.
- Recent research has linked major whale strandings around Tasmania and Victoria, since 1920, to 10-year cycles of storms created by zonal west winds; cold water moving north from Antarctica, and lower fish catches due to poor fishing conditions.
- An end to the 18-year moratorium on commercial whaling has again been deferred, with the 55 members of the International Whaling Commission voting 50-50 on the topic at the recent meetings on Sorrento, Italy. A three-quarter majority is needed to overturn the moratorium.

GONDWANA BIRDS

Research by USA and Swiss scientists has discovered that Northern Hemisphere's songbirds originally evolved in the Southern Hemisphere, particularly in Australia, almost 45 million years ago. A DNA study revealed perching birds, about half of the world's bird species, first appeared in part of the ancient continent of Gondwana.

MT MAWSON VIEW

A webcam has been set up at the base of the ski tow at Mt Mawson in the Mt Field National Park in Tasmania. Skiers can view the conditions daily by accessing www.webbed.com.au/stsa. This site will soon be linked to an Internet ski site providing snowcam and other skiing information nationwide.

SEA MAIL

Expeditioners cleaning up a 10 km section of Macquarie Island's western coast in June discovered a bottle with a message dated November 2002 and a Californian email address. Also among the 1118 items of rubbish was a CSIRO 'drift' card deliberately released from NSW.

MACQUARIE MEMORIES NO.1 (cont.) by Peter Ford

One thing that we all took an interest in was the wild life of the island. In the main, the wild life was remarkably unafraid of us. Taking care, we could approach to within touching distance of most of the birds, at least when they were sitting on eggs. It was a great delight to be in such close proximity to them. Eventually we would get to the stage where we could put a hand under them and lift them up. This was of advantage to the biologists who wanted to count eggs and observe the development of chicks.

For those of us who were photographers, we were able to get extreme close-ups. To photograph penguins, the trick was to lie on the ground. The penguins were so curious that they would walk over to see what was going on. They would get so close that we were not able to focus the cameras and we would have to shoo them away a bit. One species of penguin was called rock hoppers (see photo below), a very accurate name for this yellow crested bird. They would nest in what appeared to be quite inaccessible places on the cliff faces of the island. You would see pairs of them in places we had no hope of reaching without climbing gear. They would jump from rock to rock, ledge to ledge, without fear, to reach some impossibly high microscopic shelf on which to lay their eggs.

On one occasion, a rare sea leopard came on the beach for a sunning. In the sea this is a fearsome and dangerous animal: on land it was relatively benign and could be approached. Of course all the seals were at a disadvantage on land. The sea leopard is a predator of penguins. It can catch one in full flight (swim?) and skin it with a mighty shake of its head. While this treatment of the penguins may seem gruesome, it is nowhere near as bad as the treatment of the penguins by the earlier sealers who, it is reputed, obtained seal oil by marching the unsuspecting penguins up a ramp straight into the boilers. The remains of the boilers still litter the beach to this day.

At the largest penguin rookery on the island, at Hurd Point, there are hundreds of thousands of closely packed gentoo penguins. The packing seems random until you realise that they are just far enough apart that they cannot reach each other without leaving the nest. Nests and their collection of stones on the periphery are jealously guarded, as are the eggs and the developing chicks. Walking through the rookery invites a peck from all the penguins along your path. We only did it once. Pity the poor penguins that have to go to and come back from the sea with food for their young. They are harassed in both directions. How they find their own nest amongst all the others is a bit of a mystery.



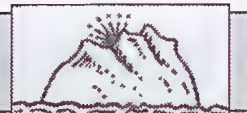
Skua gulls are an attractive bird but are predators and scavengers. An unguarded chick is in danger from them. They fly continuously over the rookery, looking for an opportunity to snatch an egg or a chick. Usually any attempt to get one is fiercely repelled by all the penguins in the vicinity but occasionally one still gets taken.

Since there are no trees on the island, all the birds nest on the ground. Some, like the dove prion, nest in abandoned rabbit burrows. These are vulnerable to the predations of feral cats, brought to the island by the sealers. As a result, cats are officially being hunted to extinction. Hopefully, by now, that has now been achieved. Reasonably safe from cats, black brow and sooty albatrosses nest on the cliffs. Because of their great wingspan, they have difficulty taking off from flat ground or water so the cliffs also give them a good launching site. They only had to step off the cliff and the updraught would carry them away and then they would hover right in front of you. A wanderer albatross chick we came across, pictured in the June 2003 issue, was on open ground, probably because it was too big to fit anywhere else. Its size would have given it protection from the cats, but we did not follow up on its progress as we did not want to disturb it too much.



**Above Left: Gentoo Penguin with chick trying to hide. Above Right: Black Brow Albatrosses
Centre: Rookery with stone nests. Below: Skua. [All photos by Peter Ford]**





COLD RECEPTION

Complaints about a documentary featuring Australian Zoo-keeper and crocodile hunter Steve Irwin's close encounter with whales in Antarctic waters was investigated by the Department of Environment and Heritage. Tapes were viewed to establish the distance Steve kept from the whales, since interacting with wildlife can attract a fine and a jail term. No charges were laid despite the AAD examining the tapes and Greenpeace requesting they be made available to the public.

WATER WATCH

Ninety million dollars will be spent by Australia to deter illegal fishing of Patagonian toothfish. Recently, *Aurora Australis* was fitted with 2 deck-mounted, .50 calibre machine guns and armed Customs officers will be aboard when patrolling waters around Heard and MacDonald Islands. These patrols are temporary, not part of scientific expeditions, and Customs hope to be operating a permanent patrol boat by the end of the year. Hobart is being promoted as the most suitable base for this boat, although other states including WA have expressed interest.

POLAR PAWS

A stuffed polar bear standing 2.44m tall was sold at auction for \$15,540 in Hobart in June. The bear was shot in Canada in a supervised culling program and was purchased for public display at the Margate train complex.

EXTREME TOURS

Advertisements for Antarctic tourist cruises have become more noticeable in newspapers and magazines. Among the range of ships and itineraries available, voyages to Antarctica are often better value than tropical cruises.

Some companies are advertising both Antarctic and Arctic tours, including trips to Iceland and a new 5-star, 106-passenger vessel called *Orion*, operated by Orion Expedition Cruises, will be cruising Australian and Antarctic waters next year.

CORE HISTORY

The deepest, oldest ice core extracted in east Antarctica has provided evidence that the next Ice Age is more than 15,000 years away. The ice core is over 3000m long and estimated to be 740,000 years old at its furthest end. Different thicknesses

of ice layers show 8 Ice Ages and 8 warmer periods called interglacials to date.

Meanwhile, scientists are arguing over the state of Lake Vostok in Antarctica, with Russian and French scientists claiming it is sterile because of toxic levels of oxygen and Americans insisting it has undiscovered life-forms. Microbes were found in the ice core being drilled above the lake, with the former group insisting they were contaminants from the drilling and the latter claiming several were authentic lake microbes. Despite pleas for a clean hole to be drilled for their 'cryobot' to be lowered into the lake, a Russian team plans to use the contaminated hole for this purpose in the 2006-2007 season.

TPN MEMBERS' NEWS

- **Ben Galbraith**, Acting General Manager of Antarctic Tasmania, has been appointed as one of Ben Lomond Skifield Management Authority members for the next 3 years.
- The new International Antarctic Weather Forecasting Handbook is available from www.bom.gov.au.
- This season's Antarctic station leaders were announced by the AAD in July. Mawson's will be Graham Cook, formerly operations manager at Strahan; scientist Dr Jeremy Smith will be at Casey, and Parks Victoria chief ranger Rachael Roberts at Davis station.
- New TPN members **Penguin Fibreglass**, received publicity for the manufacture of Igloo Satellite Cabins for Falls Creek Ski Lifts, as well as their involvement in the development of the Emergency Module Unit (EMU) which will be on show at a South African military show.
- Toll Holdings has awarded **Taylor Brothers** the contract for refurbishing the interior of NZ's Cook Strait ferry, *Arahura*.
- **Moonraker Australia** and **Saunders & Ward** both featured in a Sunday Tasmanian Supplement 'making it in Tasmania' in August.

ANTARCTIC RESEARCH FUNDS

The University of Tasmania and the Department of Primary Industries, Water and Environment have received the largest proportion of funds from the recent Federal Government grants scheme assisting Antarctic researchers. Tasmanian projects include sea-ice history and albatrosses. Remaining funds will be shared between interstate institutions.

NEW 2005 ANTARCTIC CALENDAR

IMAGES FROM A FROZEN LAND

ANARE expeditioners Lyn Irvine and Andy Townsend have created a long awaited 2005 Antarctic calendar. Featuring full colour photos of wildlife and scenery and spanning all seasons of the Antarctic year, this calendar shows the 'Australian' side of the continent. Making an excellent Christmas gift, this superb quality calendar will be produced annually, with the first release coinciding with the 50th anniversary of Mawson Station.

Lyn and Andy are keen environmentalists and passionate about Antarctica and photography. They have combined their talents to produce a calendar that portrays the colourful, spectacular and unique elements of the continent. The calendar includes outstanding images of penguins, seals, jade ice bergs, coastal ice cliffs and the stunning Aurora Australis. A detailed introduction along with captions accompanying each photograph serves to inspire and educate... and alert to the need for eternal protection of this land.



ANTARCTICA

Images from a frozen land

2005 CALENDAR

PHOTOGRAPHY BY
ANDY TOWNSEND & LYN IRVINE

For each calendar produced, Lyn and Andy will make a donation to Greening Australia, who will plant a tree in Tasmania. This replaces 1000-fold the paper used in the production process, setting an environmental precedent for other publishers.

'Antarctica 2005: Images from a frozen land' is available by calling Lyn Irvine on +61 (0)3 6229 8168, or sending an email to orders@imagesofantarctica.com. The calendar is available for \$24.95 including postage and handling (within Australia), or \$39.95 for international orders.

2005 Calendar

13 Stunning images spanning all seasons of the Antarctic year

Informative text and captions

One tree planted for each calendar produced

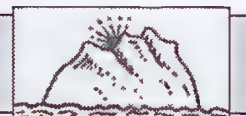
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WEATHER INVENTIONS

New automatic weather stations to be deployed at inland Antarctica sites such as Dome A this season have been invented by Tasmanian firm Climetrics. The company received funding from a government Commercialising Emerging Technology grant and will be working with the AAD to finalise and field test a working prototype. The Weather stations are designed to withstand extreme cold, limited solar radiation and extreme isolation.

ANTARCTIC SPACE ANNOUNCED

The Tasmanian Museum & Art Gallery (TMAG) has been given \$600,000 by the State Government to establish a new Antarctic and Southern Ocean exhibition. A section of the new display space, to the right of the entrance to TMAG off their courtyard, was used to launch the State Government's Antarctic Policy recently. The rest of the space to be developed is between the courtyard and Macquarie Street, and will feature the building's original timber columns. The exhibition will focus on the significance of Tasmania's contributions to Antarctic and Southern Ocean exploration, and will include some of display items from the failed Antarctic Adventure complex.

Three new positions have been advertised by TMAG for the Antarctic and Southern Ocean Unit. Successful applicants for a full-time Senior Curator and an Education Officer, and a part-time Program Delivery Officer, will be announced soon.

FUTURE BUSINESS

The following is a list of some of the Antarctic and Southern Ocean-related projects with potential Tasmanian input, some underway and some undeveloped:

- Hobart International Airport development and Skytraders air link requirements
- AAD Tenders for goods and services
- CSIRO, ACE CRC and Australian Maritime College supplies
- Souvenirs of Tasmania's Antarctic connections for visiting tourists and expeditioners
- TPN Antarctic calendars and postcards
- Antarctic-themed arts and crafts

NEW MINI-SUB

The plastic prototype of a Serafina, a 40cm long submersible, has been unveiled at ANU. The

working mini-submarines will be made of metal and battery operated. They are designed to be launched in a large group, dive en masse to 5000 metres, travel at one metre per second and programmed to take photos of surrounding sea-life before returning to the research vessel.

ANTARCTIC LITERATURE WIN

Congratulations to Coral Tulloch, Tasmanian author of 'Antarctica – Heart of the World', for winning the Wilderness Society's 2004 Environment Award for Children's Literature.

SATELLITE SCANS

Ten year's research for CSIRO's Wealth from Oceans Flagship Program can now be accessed by computer from satellite data. Information gained by charting and monitoring ocean currents, which may effect fish mortality and breeding habits, water temperatures, wave height and sea-surface conditions is now available at www.marine.csiro.au/remotesensing/oceancurrents/

Evidence of craters caused by asteroids has been discovered under the Antarctic ice sheet. Scientists from Delft University in the Netherlands used 2 satellites to map anomalies in the gravity from rocks below the ice, where holes were refilled with breccia, a mixture of ice, rock and other debris. It is believed that the reversing of the Earth's magnetic field was also caused by the asteroids' impact, about 780,000 years ago.

IGLOO UPDATE

New export orders for Igloo Satellite Cabins, now manufactured by Penguin Fibreglass, have been received from USA and Korea recently. Enquiries have also been made by Spain, India, Papua New Guinea, a Welsh organisation for use in the Falklands and a South Australian company for use in Alaska.

SPACE DESIGNS

The European Space Agency (ESA) will be entering a design in the competition held by the Alfred-Wegener-Institute for a new Antarctic base. Using carbon-fibre-reinforced-plastic, the self-supporting, lightweight, shell-like structure will be autonomous, with solar power, and systems for recycling, cleaning and airborne pathogenic particle removal. For further details, see www.newscientist.com/ (25 August 2004).



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POLAR CALENDAR



- | | | | |
|-------|-----------|-------|---|
| 5-9 | September | 2004 | Voyages of discovery: parting the seas of Technology: 30 th annual international Association of Aquatic and Marine Science Library and Information Centres (IAMSLIC) conference - including polar and oceanographic information in the 21 st Century. Joint IAMSLIC/PLC meeting, 8 September. CSIRO Marine Laboratories. Hobart, Tasmania. For further details: www.iamslc.org/conferences.html |
| 8 | September | 2004 | Last day for TPN members to comment on TPN Tourism Position Paper. For further details contact Antarctic Tasmania, Cordula.Ruckstuhl@development.tas.gov.au |
| 17 | September | 2004 | Tasmanian Polar Network AGM. 11.00am-1.00pm. Tasmanian Museum & Art Gallery. Hobart, Tasmania. |
| 22 | September | 2004 | Attention Exporters: Export component of the new Integrated Cargo System, developed by the Australian Customs Service, will be introduced. |
| 5-7 | October | 2004 | Forum for Research into Ice Shelf Processes (FRISK). AWI, Helgoland, Germany. |
| 6 | October | 2004 | Attention Exporters: Integrated Cargo System (ICN) will replace current EXIT system. Details available at www.customs.gov.au – Cargo Management Re-engineering. |
| 24-29 | October | 2004 | Scientific Steering Group for World Climate Research Program meeting. ACE CRC, University of Tasmania. Hobart, Tasmania. |
| 25 | October | 2004- | CCAMLR XXIII meetings. Hobart, Tasmania. |
| 5 | November | 2004 | |
| 11-12 | November | 2004 | 'The Role of Antarctic Research in Australian Science and Policy Advice' - National Committee on Antarctic Research (NCAR) and AAD joint conference. Canberra, ACT. |

NEW ANTARCTIC FLIGHTS

- | | | | |
|----|----------|------|--|
| 1 | November | 2004 | Positioning flights by Skytrader's CASA-212 aircraft. Date of departure to Casey Base yet to be determined. |
| 20 | November | 2004 | CASA-212 to transfer expeditioners and cargo from Voyage I, AURORA AUSTRALIS, docked at Casey Base. Flights to Davis and Mawson bases to follow. |
| 10 | December | 2004 | CASA-212 to transfer expeditioners and cargo from V2 as above. |
| 18 | December | 2004 | CASA-212 to transfer expeditioners and cargo to V3 returning to Hobart. |
| 18 | February | 2005 | CASA-212 to transfer expeditioners and cargo to V5 returning to Hobart. |
| 2 | March | 2005 | CASA-212 returns to Hobart, end of season. |

IN ADVANCE

- | | | | |
|-------|------|-----------|--|
| 12-15 | July | 2005 | COMNAP XVII meetings. Sofia, Bulgaria. |
| | July | 2006 | COMNAP XVIII Meetings. Hobart, Tasmania. |
| | | 2007-2008 | International Polar Year. Planning already underway. |

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2-18	October	2004	AURORA AUSTRALIS V1	Departs Hobart for Marine Science.
23-25	October	2004-	AURORA AUSTRALIS V1	Casey Base.
28	November	2004		
2	November	2004	AURORA AUSTRALIS V1	Marine Science.
5-7	November	2004	AURORA AUSTRALIS V1	Casey Base.
16-18	November	2004	AURORA AUSTRALIS V1	Arrives Hobart, departs for Davis Base.
24	November	2004	SP. OF ENDERBY V1.1	Departs Bluff, NZ, for Macquarie Is.
29-30	November	2004	SP. OF ENDERBY V1.1	Macquarie Island.
30	November	2004-	AURORA AUSTRALIS V2	Davis Base.
6	December	2004		
2-5	December	2004	L'ASTROLABE	Arrives Hobart, departs for Du. D'Urville.
11-12	December	2004	SP. OF ENDERBY V1.1	Arrives Dunedin, NZ, departs for Mac. Is.
11-27	December	2004	L'ASTROLABE	Dumont D'Urville.
17-18	December	2004	SP. OF ENDERBY V2.1	Macquarie Island.
18-20	December	2004	AURORA AUSTRALIS V2	Arrives Fremantle, departs for Marine Sci.
22	December	2004-	AURORA AUSTRALIS V3	Marine Science.
10	February	2005		
26-29	December	2004	VASILIIY GOLOVNIN V4	Arrives Hobart, departs for Casey Base
29	December	2004	SP. OF ENDERBY V2.1	Arrives Dunedin, NZ
2-5	January	2005	L'ASTROLABE	Arrives Hobart, Departs for Du. D'Urville.
7-12	January	2005	VASILIIY GOLOVNIN V3	Casey Base.
11	January	2005-	L'ASTROLABE	Dumont D'Urville.
10	February	2005	L'ASTROLABE	
15	January	2005	SP. OF ENDERBY V4.1	Departs Bluff, NZ for Macquarie Island.
15	January	2005	KAP. KHLEBNIKOV V4.2	Departs Hobart for Macquarie Island.
17-18	January	2005	SP. OF ENDERBY V4.1	Macquarie Island.
20-25	January	2005	VASILIIY GOLOVNIN V4	Mawson Base.
28	January	2005-	VASILIIY GOLOVNIN V4	Davis Base.
1	February	2005		

